

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

5    **Listing of Claims:**

Claim 1 (currently amended): A method for re-orientating digital images comprising the following steps:

analyzing an image stored in a computer readable media and determining an image re-orientation requirement according to an image analysis output[;],  
10    wherein the analyzing step includes an image analysis process to determine an axis weighting potential for a first axis and an axis weighting potential for a second axis;  
determining a direction of re-orientation of the image according to the image re-orientation requirement[;], wherein the re-orientation requirement is  
15    determined according to the axis weighting potentials for the first and second axes; and  
re-orientating the image according to the determined direction of re-orientation.

Claim 2 (currently amended): The method of claim 1, wherein the analyzing step includes  
20    comparing properties of the image to predefined threshold values and deriving comparison values, determining whether an image analysis process can be omitted according to the comparison values and if so, determining a re-orientation requirement according to the comparison values.

25    Claim 3 (canceled)

Claim 4 (currently amended): The method of claim 13, wherein the first and second axes are mutually perpendicular.

Claim 5 (currently amended): The method of claim 13, wherein the image analysis process is an image zone analysis process comprising the following steps:

5       analyzing a plurality of image zones of the image to realize a plurality of zone element values;

      comparing the zone element values returned from the analyzing step to threshold predetermined image element values and determining a class probability rating for each image element class of a plurality of image element classes for each image zone;

10      selecting the image element class with the highest class probability rating for each image zone;

      comparing the highest class probability rating for each image zone to a predetermined threshold value and, if the class probability ratings are greater than the predetermined threshold value, generating a zone potential rating for each image zone according to the probability rating for the selected image element class and a table of predetermined factors; and

15      calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

20     Claim 6 (currently amended): The method of claim 13, wherein the image analysis process is an image zone analysis process comprising the following steps:

      analyzing a plurality of image zones of the image to realize a plurality of zone element values;

      comparing the zone element values returned from the analyzing step to threshold predetermined image element values and determining a class probability rating for each image element class of a plurality of image element classes for each image zone;

25      comparing the class probability ratings for each image zone to a predetermined

threshold value and, if the class probability ratings for each image zone are greater than the predetermined threshold value, generating a zone potential rating for each image zone by multiplying the class probability rating of each image element class by corresponding values for each image element class stored in a table of predetermined factors and selecting the image element class with the highest class probability rating; and  
5 calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

10 Claim 7 (currently amended): The method of claim 13, wherein the image analysis process is a facial feature analysis process comprising the following steps:  
analyzing the image to determine the size and orientation of facial features, and  
to derive a significance value for the facial features; and  
comparing the significance value to a predetermined threshold value and, if the  
15 significance value is greater than the threshold predetermined value,  
calculating a weighting potential for the first axis and the second axis of the image according to the size and orientation of the facial features.

20 Claim 8 (currently amended): The method of claim 13, wherein the image analysis process comprises an image zone analysis process and a facial feature analysis process.

25 Claim 9 (currently amended): The method of claim 8, wherein the image analysis process includes comparing an output of one of the processes to a predefined threshold value and deriving a comparison value, and determining whether the other process can be omitted according to the comparison value.

Claims 10-12 (canceled)

Claim 13 (currently amended): A method for re-orientating digital images comprising the following steps:

5       analyzing an image stored in a computer readable media by an image analysis process comprising an image zone analysis process for determining an axis weighting potential for a first axis and an axis weighting potential for a second axis, an image re-orientation requirement being determined according to the axis weighting potentials for the first and second axes, ~~and a predetermined value~~;

10      determining a direction of re-orientation of the image according to the re-orientation requirement, the direction of re-orientation of the image being determined by comparing axis weighting potentials of the first and second axes to determine a dominant axis and determining the direction of re-orientation of the image such that the dominant axis will appear in a vertical viewing plane according to the axis weighting potential of the dominant axis; and

15      re-orientating the image according to the determined direction of re-orientation.

Claim 14 (currently amended): The method of claim 13, wherein the analyzing step includes comparing properties of the image to ~~predefined threshold~~ values and deriving comparison values, determining whether an image analysis process can be omitted according to the comparison values, and if so, determining a re-orientation requirement according to the comparison values.

25      Claim 15 (original): The method of claim 13, wherein the first and second axes are mutually perpendicular.

Claim 16 (currently amended): The method of claim 13, wherein the image zone analysis

process comprises the following steps:

- analyzing a plurality of image zones of the image to realize a plurality of zone element values;
- 5 comparing the zone element values returned from the analyzing step to predetermined image element threshold values and determining a class probability rating for each image element class of a plurality of image element classes for each image zone;
- selecting the image element class with the highest class probability rating for each image zone;
- 10 comparing the highest class probability rating for each image zone to a threshold predetermined value and, if the class probability ratings are greater than the predetermined threshold value, generating a zone potential rating for each image zone according to the probability rating for the selected image element class and a table of predetermined factors; and
- 15 calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

Claim 17 (currently amended): The method claim 13, wherein the image zone analysis process comprises the following steps:

- 20 analyzing a plurality of image zones of the image to realize a plurality of zone element values;
- comparing the zone element values returned from the analyzing step to threshold predetermined image element values and determining a class probability rating for each image element class of a plurality of image element classes for each image zone;
- 25 comparing the class probability ratings for each image zone to a threshold predetermined value and, if the class probability ratings for each image zone are greater than the predetermined threshold value, generating a zone

potential rating for each image zone by multiplying the class probability rating of each image element class by corresponding values for each image element class stored in a table of predetermined factors and selecting the image element class with the highest class probability rating; and  
5 calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

10 Claim 18 (currently amended): The method of claim 13, wherein the image analysis process further comprises a facial feature analysis process having the following steps:

analyzing the image to determine the size and orientation of facial features, and to derive a significance value for the facial features; and  
15 comparing the significance value to a predetermined threshold value and, if the significance value is greater than the predetermined threshold value, calculating a weighting potential for the first axis and the second axis of the image according to the size and orientation of the facial features.

20 Claim 19 (currently amended): The method of claim 18, wherein the image analysis process includes comparing an output of one of the processes to a predefined threshold value and deriving a comparison value, and determining whether the other process can be omitted according to the comparison value.

25 Claim 20 (currently amended): The method of claim 13, wherein in the analyzing step, the image re-orientation requirement is derived by comparing the outputs of a facial feature analysis process and an image zone analysis process with predetermined threshold values to determine an order of significance for each process, and using axis weighting potential values from a most significant process to determine the image re-orientation requirement.

Claim 21 (new): A method for re-orientating digital images comprising the following steps:

5       analyzing an image stored in a computer readable media and determining an image re-orientation requirement according to an image analysis output;  
determining a direction of re-orientation of the image according to the re-orientation requirement, wherein the direction of re-orientation of the image is determined by comparing axis weighting potentials of the first and second axes to determine a dominant axis and the direction of re-orientation  
10      of the image is determined such that the dominant axis will appear in a vertical viewing plane according to the axis weighting potential of the dominant axis; and  
re-orientating the image according to the determined direction of re-orientation.

15      Claim 22 (new): A method for re-orientating digital images comprising the following steps:

20       analyzing an image stored in a computer readable media and determining an image re-orientation requirement according to an image analysis output, wherein the image re-orientation requirement is derived by comparing outputs of a facial feature analysis process and an image zone analysis process with at least one threshold value;  
determining a direction of re-orientation of the image according to the image re-orientation requirement; and  
re-orientating the image according to the determined direction of re-orientation.

25      Claim 23 (new): The method of claim 22, wherein the image re-orientation requirement is determined according to axis weighting potential values.

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Claim 24 (new): The method of claim 23, further comprising the step of determining whether a difference of the axis weighting potential values is above the threshold value, wherein if the difference is above the threshold value, then re-orientation is required.

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